

Notice of Allowability

Application No.

10/763,896

Examiner

James P. Hughes

Applicant(s)

CROSSMAN-BOSWORTH ET AL.

Art Unit

2881

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 2-9-05.
2. ☒ The allowed claim(s) is/are 1-20 and 36-48.
3. ☒ The drawings filed on 1-4-04 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|---|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____ |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____ |

DETAILED ACTION

1. Non-elected claims 21-35 are cancelled per applicants' request.

Allowable Subject Matter

2. Claims 1-20 and 36-48 are allowed. The following is an examiner's statement of reasons for allowance. Claim 1 is allowed because the prior art of record fails to teach or fairly suggest a compact scanner, or means for, comprising: an optical component that is attached to the distal end of the waveguide, and an actuator for exciting a portion of the waveguide that is adjacent to the distal end and is cantilevered from the actuator to vibrate at a desired frequency and in a desired pattern, excitation of the portion of the waveguide that is cantilevered from the actuator causing a rotation to occur for scanning a region with light from the optical component, wherein a characteristic of the light emitted from the optical component is selectively determined by controlling a spatial relationship between the effective light source position and at least one of: a back focal point of the optical component and a location of a vibratory node of the portion of the waveguide that is cantilevered from the actuator; in combination with the other recited limitations in the claim

Claim 36 is allowed because the prior art of record fails to teach or fairly suggest a method, or means for, scanning a region with light comprising: controlling a dimensional configuration of the waveguide so as to position the effective light source in a desired relationship relative to at least one of: a back focal plane of the optical component; and a vibratory node of the waveguide, said optical component being thereby caused to rotate with the

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cantilevered portion of the waveguide is vibrating, so that light exiting the optical component scans the region has a desired characteristic; in combination with the other recited limitations in the claim. Claims 2-20 and 37-48 are allowed by virtue of their dependence on claims 1 and 36 respectively.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Response to Arguments

3. Applicant's arguments, see pages 8 and 9 of the amendment, filed on February 9, 2005, with respect to the rejections of claims 1-20 and 37-48 have been fully considered and are persuasive. The rejections of the claims have been withdrawn. Applicants' argument that Seibel does not suggest that a characteristic of light emitted from an optical component in a scanner is selectively determined by controlling a spatial relationship between an effective light source position and either a back focal point of the optical component or a location of a vibratory node of the portion of the waveguide that is cantilevered from an actuator (See first paragraph on page 9 of the amendment) is persuasive.

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Conclusion

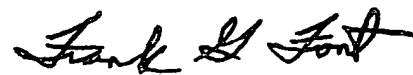
4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Fauver et al. (6,856,712) is the US Patent resulting from US Application # 09/994,377 which was identified by applicant (US Pre-grant Publication # 2002/0064341) in the IDS received on Jun 28, 2004. Smithwick et al. (6,845,190) teaches a controller for an optical fiber scanner and has a common inventor as the instant application.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James P. Hughes whose telephone number is 571-272-2474. The examiner can normally be reached on Monday - Friday 9am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John R. Lee can be reached on 571-272-2477. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

James P. Hughes
Patent Examiner
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Frank G. Font
Supervisory Patent Examiner
Technology Center 2800